AMENDMENTS TO THE CLAIMS

1-74 (Canceled)

75. (Original) A method for detecting whether a subject to likely to have a colon neoplasia comprising:

a) obtaining a biological sample from said subject;

b) detecting one or more polypeptides selected from among: one or more secreted ColoUp1 polypeptides and one or more secreted ColoUp2 polypeptides, wherein the presence of said at least one polypeptide is indicative of colon neoplasia.

76. (Original) The method of claim 75, wherein the secreted ColoUp2 polypeptide is selected from among:

a) a secreted polypeptide produced by the expression of a nucleic acid that is at least 95% identical to the amino acid sequence of SEQ ID No: 5;

b) a secreted polypeptide produced by the expression of a nucleic acid that is a naturally occurring variant of SEQ ID No: 5;

c) a secreted polypeptide produced by the expression of a nucleic acid that hybridizes under stringent conditions to a nucleic acid sequence of SEQ ID No: 5;

d) a secreted polypeptide having a sequence that is at least 95% identical to the amino acid sequence of SEQ ID No: 3; and

e) a secreted polypeptide having a sequence that is at least 95% identical to the amino acid sequence of SEQ ID No: 21.

77. (Original) The method of claim 75, wherein the secreted ColoUp2 polypeptide is produced by the expression of a nucleic acid having the sequence of SEQ ID No: 5.

78. (Original) The method of claim 75, wherein the secreted ColoUp2 polypeptide is produced by the expression of a nucleic acid sequence that is at least 98-99% identical to the nucleic acid sequence of SEQ ID No: 5.

79. (Original) The method of claim 1, wherein the secreted ColoUp2 polypeptide has an amino acid sequence that is at least 98-99% identical to an amino acid sequence selected from among SEQ ID No: 3 and SEQ ID No:21.

80. (Original) The method of claim 75, wherein the secreted ColoUp1 polypeptide is selected from among:

a) a secreted polypeptide produced by the expression of a nucleic acid that is at least 95% identical to the amino acid sequence of SEQ ID No: 4;

b) a secreted polypeptide produced by the expression of a nucleic acid that is a naturally occurring variant of SEQ ID No: 4;

c) a secreted polypeptide produced by the expression of a nucleic acid that hybridizes under stringent conditions to a nucleic acid sequence of SEQ ID No: 4;

d) a secreted polypeptide having a sequence that is at least 95% identical to the amino acid sequence of SEQ ID No: 1; and

e) a secreted polypeptide having a sequence that is at least 95% identical to the amino acid sequence of SEQ ID No: 2.

81. (Original) The method of claim 75, wherein the secreted ColoUp1 polypeptide is produced by the expression of a nucleic acid having the sequence of SEQ ID No: 4.

82. (Original) The method of claim 75, wherein the secreted ColoUp1 polypeptide is produced by the expression of a nucleic acid sequence that is at least 98-99% identical to the nucleic acid sequence of SEQ ID No: 4.

83. (Original) The method of claim 1, wherein the secreted ColoUp1 polypeptide has an amino acid sequence that is at least 98-99% identical to an amino acid sequence selected from among SEQ ID No: 1 and SEQ ID No:2.

84. (Original) The method of claim 75, wherein the biological sample is a blood sample or a fraction derived from blood.

85. (Original) The method of claim 84, wherein the biological sample is selected from among: whole blood, blood plasma, and blood serum.

86. (Original) The method of claim 75, wherein the biological sample is derived from the inner wall and/or lumen of the intestinal tract.

87. (Original) The method of claim 86, wherein the biological sample is a stool sample.

88. (Original) The method of claim 75, wherein the biological sample is a urine sample.

89. (Original) The method of claim 75, wherein the polypeptide is detected by an assay that employs an antibody.

90. (Original) The method of claim 89, where the assay is selected from among: an immunoprecipitation assay, a Western blot, a radioimmunoassays and an enzyme-linked immunosorbent assay (ELISA).

91. (Original) The method of claim 89, wherein the assay comprises contacting the biological sample with an antibody that interacts with a secreted ColoUp1 polypeptide or a secreted ColoUp2 polypeptide.

92. (Original) The method of claim 89, wherein the antibody interacts with an epitope of an amino acid sequence selected from among: SEQ ID No: 1 and SEQ ID No: 2.

93. (Original) The method of claim 89, wherein the antibody interacts with an epitope of the amino acid sequence of SEQ ID No: 3.

94. (Original) The method of claim 89, wherein the antibody interacts with an epitope of the amino acid sequence of SEQ ID No: 21.

95. (Original) The method of claim 89, wherein the antibody is detectably labeled.

96. (Original) The method of claim 95, wherein the label is selected from the group consisting of an enzyme, a fluorescent substance, a chemiluminescent substance, a chromophore, a radioactive isotope and a complexing agent.

97. (Original) The method of claim 75, further comprising determining the amount of at least one secreted ColoUp1 polypeptide and/or at least one ColoUp2 in the biological sample.

98. (Original) The method of claim 75, wherein the amount of at least one secreted ColoUp1 polypeptide and/or at least one secreted ColoUp2 polypeptide in the biological sample is compared to a predetermined standard.

99. (Original) The method of claim 75, wherein the amount of at least one secreted ColoUp1 polypeptide and/or at least one secreted ColoUp2 polypeptide in the biological sample is compared to the subject's historical baseline.

100. (Original) The method of claim 75, wherein the presence of at least one secreted ColoUp1 polypeptide and/or at least one secreted ColoUp2 polypeptide is indicative that the subject is likely to harbor a colon adenoma or a colon cancer.

101. (Original) The method of claim 75, wherein the presence of at least one secreted ColoUp1 polypeptide and/or at least one secreted ColoUp2 polypeptide aids in determining the therapeutic protocol to be administered to a subject having a colon neoplasia.

102. (Original) The method of claim 75, wherein the subject was not previously diagnosed with colon cancer.

103. (Original) The method of claim 75, wherein the subject has previously received or is currently receiving a therapy for colon cancer, wherein the presence of at least one secreted ColoUp1 polypeptide and/or at least one secreted ColoUp2 polypeptide indicates that the subject is likely to have a relapse or a persistent or progressive colon cancer.

104. (Original) The method of claim 75, wherein the colon neoplasia is a colon adenoma.

105. (Original) The method of claim 75, wherein the colon neoplasia is colon cancer.

106. (Original) The method of claim 75, wherein the colon neoplasia is metastatic colon cancer.

107. (Original) The method of claim 75, comprising detecting at least one secreted ColoUp1 polypeptide and at least one secreted ColoUp2 polypeptide in the biological sample.

108. (Original) A kit for detecting one or more molecular markers of colon neoplasia in a biological sample, comprising:

a) an antibody which interacts with an epitope of a secreted ColoUp1 polypeptide or a secreted ColoUp2 polypeptide; and
b) instructions for use.

109. (Original) The kit of claim 108, wherein the antibody interacts with an epitope of a polypeptide selected from among: the polypeptide of SEQ ID No:1, the polypeptide of SEQ ID No:2, the polypeptide of SEQ ID No:3 and the polypeptide of SEQ ID No:21.

110. (Original) The kit of claim 108, wherein the antibody is detectably labeled.

111. (Original) A purified polypeptide consisting essentially of an amino acid sequence that is at least 95% identical to the sequence of SEQ ID No: 21.

112. (Original) The purified polypeptide of claim 111, wherein the purified polypeptide consists essentially of an amino acid sequence that is at least 98-99% identical to the sequence of SEQ ID No: 21.

113. (Original) The purified polypeptide of claim 111, wherein the purified polypeptide consists essentially of the amino acid sequence of SEQ ID No: 21.

114. (Original) A fusion protein comprising a first polypeptide domain and a second polypeptide domain, wherein the first polypeptide domain consists essentially of an amino acid sequence that is at least 95% identical to an amino acid sequence of SEQ ID No. 21.

115. (Original) The fusion protein of claim 114, wherein the second polypeptide domain is a domain selected from the group consisting of: a detection domain, a purification domain and an antigenic domain.

116. (Original) An antibody that binds specifically to a ColoUp2 polypeptide consisting essentially of the amino acid sequence of SEQ ID No: 21.

117. (Original) The antibody of claim 116, wherein the antibody binds the ColoUp2 polypeptide with a dissociation constant of less than 10^{-6}M.

118. (Original) The antibody of claim 116, wherein the antibody is a monoclonal antibody.

119. (Original) The antibody of claim 116, wherein the antibody is effective for detecting the ColoUp2 polypeptide in a blood sample.

120. (Original) The antibody of claim 116, wherein the antibody is effective for detecting the ColoUp2 polypeptide in a sample comprising cells from a colon neoplasia.

121. (Original) A method for generating a monoclonal antibody of claim 118, the method comprising:

(a) administering to a mouse an amount of an immunogenic composition comprising the ColoUp2 polypeptide effective to stimulate a detectable immune response;

(b) obtaining antibody-producing cells from the mouse and fusing the antibody–producing cells with myeloma cells to obtain antibody-producing hybridomas;

(c) testing the antibody-producing hybridomas to identify a preferred hybridoma, wherein the preferred hybridoma is a hybridoma that produces a monocolonal antibody that binds specifically to the ColoUp2 polypeptide;

(d) culturing the preferred hybridoma cell culture that produces the monoclonal antibody that binds specifically to the ColoUp2 polypeptide; and

(e) obtaining the monoclonal antibody that binds specifically to the ColoUp2 polypeptide from the cell culture.

122. (Original) The method of claim 121, wherein testing the antibody-producing hybridomas comprises testing whether the antibody-producing hybridomas produce an antibody that binds to the ColoUp2 polypeptide in an assay selected from the group consisting of: an enzyme-linked immunosorbent assay, a Bia-core assay and an immunoprecipitation assay.